

REPORT
OF THE
CHIEF ENGINEER
OF THE
MEGANTIC JUNCTION
Railway,
TO THE
PROVISIONAL COMMITTEE.

Presented on the 4th April, 1853.

QUEBEC:
PRINTED BY J. T. BROUSSEAU, 9, BUADE STREET.

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CHIEF ENGINEER

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PROVISIONAL COMMITTEE

Presented on the 25th April, 1873

PRINTED BY

J. T. BROWN, 10, BROAD STREET

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The Provisional Directors of the Megantic Junction Railway Company, have much pleasure in informing the shareholders that the Bill to Incorporate the Company has passed its third reading in the Provincial Parliament and now only awaits the Governor General assent.

The subscription List is rapidly filling up, and the Provisional Directors, entertain no doubt, but that the final location of the Line may be commenced early in May, and the construction in June next, as Tenders of the most favorable nature have been received for the completion of the undertaking.

Directors appointed by the Act of Incorporation.

WILLIAM PRICE, Esq., Wolfesfield House, Quebec,
Director Quebec and Richmond Railway.

GEO. BESWICK, Esq., The Cottage, Point Levi,
President Quebec and Richmond Railway.

E. P. MACKIE, Esq., Quebec,
Director Quebec and Richmond Railway.

J. M. FERRES, Esq., Montreal,
Director Quebec and Richmond Railway.

J. G. CLAPHAM, Esq., Inverness,
M. P. P. for the County of Megantic.

JOHN SMITH, Esq., Inverness }
JOHN R. LAMBLY, Esq., Leeds } County of Megantic.

Acting Secretary and Treasurer,
J. T. BROUSSEAU.

REPORT.

Megantic Junction Railway,
Engineer Department, Leeds, 4th April, 1853. }

GENTLEMEN,

In compliance with your instructions to survey the route for a Line of Railway to connect the Townships of Nelson, Leeds, Inverness, Halifax and New Ireland with the Quebec and Richmond Railway and to examine the River Thames and Lakes in the latter Townships, with a view of improving the navigation. I have the honor to submit the following Report with accompanying Plans.

Previous to commencing the instrumental survey, I deemed it proper, personally to explore the country in order to ascertain its general features, as likewise the most important places near to which it would be advisable to locate the Line. I found after careful examination, that the proposed Line should diverge from the Quebec and Richmond Railway, at a point in the Township of Nelson.

The country to the South East of this point has in general a very easy and gradual rise to about half way up the Township of Inverness, where a range of hills runs in a South Westerly direction, transversely to the probable route of the proposed Line of Railway. Beyond this the country is undulating, but offering no difficulty to easy construction.

The result of this exploration led me to consider the following points as important in connection with the survey:--

1st. The Red Falls on the River Becancour, where next summer the extensive water power, existing at this place, will be employed in driving several large Mills.

2nd. Lloyd's Mills at the Falls of Inverness. The head and fall at this place is near sixty feet, which by the construction of the Railway, will no doubt, be used in the working of extensive factories. There is already at this point a large Grist Mill, a Saw Mill and a Carding and Fulling Mill, doing an extensive business, notwithstanding the disadvantages of bad roads and long distance from a suitable Market.

About 2 miles to the North East of this place, are the Palmer Falls of about 80 feet in height, and on the other streams in Inverness, Leeds, Halifax and New Ireland, many Mills are in operation. The aggregate amount of fall available for manufacturing purposes at various places in the vicinity of the proposed Railway, exceeds six hundred feet.

3rd. The village of Leeds in the Township of the same name, is a thriving settlement on the Craig's Road and near to a copper mine recently opened. The village is in the centre of one of the best Agricultural Townships in Canada, and has for a back country, the rapidly improving Townships of Thetford, Broughton and Tring, whilst the produce of the Townships of Ham, Wolfestown and a part of Ireland, necessarily passes through it by the Craig Road.

4th. The North East end of Lake Joseph, the lowest of a chain of Lakes, extending to with-

in 1½ mile of Lake Aylmer, from whence there might be made a navigable water communication through the St. Francis to Sherbrooke. From the foot of Lake Joseph, with some improvements at two points, steamboats may be made to pass up that Lake through Lake William and Trout Lake to the lower end of Black Lake.

The land bordering on these Lakes is equal to any in Canada; thickly settled and abounding in minerals, lead, copper and zinc having lately been found in great abundance.

A company is already engaged in carrying on Copper-mining on a large scale and the opening of this Road, will no doubt, cause many more to commence operations.

On the Black Lake, the highest of this chain of Lakes, there is a vast supply of Pine and Tamarac timber, sufficient to give active employment for years to come to a Railway in transporting the same to Market.

This timber may be towed by Steamers to the foot of Lake Joseph, and as considerable Water powers can be obtained by improving the River between the Lakes, these could be made available for Mill purposes, in sawing up this Lumber for conveyance to Market by Railway.

On account of the advanced period of the season, I was unable to make a close examination of the River between the Lakes, but from a general knowledge I have acquired, I am convinced that the expenditure of a very moderate sum, would render it navigable from the foot of Lake Joseph to the lower end of Black Lake, for Steamboats, and in this I am fully borne out by the Report made by Mr. Russel some years since to the Honorable W. B. Felton, Crown Lands Commissioner.

The mineral resources of this portion of the Country have hitherto been lying dormant from the

great expence of exportation to a Market. Agriculture and the Lumber Trade have been retarded from the same cause; the Roads to Quebec, the market to which the District naturally looks, being at seasons impassable and never permitting the conveyance of a reasonable load. It is also an important fact, that without the proposed Railway, the Quebec and Richmond Railway will derive no benefit from the traffic of the District, in consequence of the difficulty of reaching any of its stations, the nearest by any passable Road, being upwards of 30 miles and as the station is only six miles from a Steamboat landing on the St. Lawrence, parties would have every inducement to proceed to Quebec by water rather than avail themselves of the Railway.

From the above considerations I judged that a Line commencing on the Quebec and Richmond Railway, north of the River Becancour, running as near as possible to the Red Falls, passing by the Falls of Inverness and thence along the valley of the River Thames to the foot of Lake Joseph, would be the most desirable route embracing the largest possible extent of the country proposed to be connected with the Quebec and Richmond Railway.

From the proposed Tern-inus, if it should be desirable at a future day, I am disposed to believe that a Line could be extended by way of the Lake to Sherbrooke, forming a junction with the St. Lawrence and Atlantic Railway at that point, thereby saving a distance of upwards of 20 miles to the traffic between Quebec and the South.

The features of the country form an insurmountable obstacle to making a Line that should embrace the points above alluded to and traverse also the Township of Leeds. But as it would be indispensable to secure the great traffic of this Township

from the Mills, Mines and Agricultural Produce both within itself, and the country opened up by the Craig Road, this object, I am of opinion, would be best attained by a branch of a cheap character, diverging from the main Line near the Falls of Inverness and passing up the Palmer Valley to the village of Leeds.

I commenced operations with the Engineering party, on the 28th December last, and the only difficulty encountered on the survey was the range of Hills through Inverness before mentioned.

After running some experimental Lines, I have found a Route by which this difficulty can be overcome with moderate grades and at a reasonable cost. This Route diverges from the Quebec and Richmond Railway, near the boundary Line, between the Seignior of St. Croix and the Township of Nelson ascends with easy grades to the Gosford Road which it crosses about two miles to the South of the village of St. Agathe, thence proceeds to the Falls of Inverness, crossing the River Palmer at a point a quarter of a mile below the Falls. From the Falls of Inverness, the Line follows up the valley of the River Thames to Lake Joseph,—the length of the Line is 20 miles.

The works, except at one point, are light and no gradient exceeds 32 feet per mile and this only for a short distance.

From the point marked A on the Plans, the branch to Leeds diverges from the main Line with a curve of 1910 feet Radius (which I may here remark is the shortest Radius I have found necessary to adopt on the whole Line) passes into the valley of the River Palmer above the Falls and continues along the valley for a distance of two miles, thence up the vallies of the River Osgood and Gough's Brook to the Village of Leeds. Only one gradient on this Branch would exceed 40 feet

per mile, and very little cutting or embankment is required. The total length of this branch is five miles, making the whole Line 24 miles in length.

It having been represented to me by parties living in the neighbourhood of Inverness that a good and more direct Line could be obtained through some of the valleys leading up the ridge in Inverness, before mentioned, I ran experimental lines through the most feasible of these valleys, but in no case found a workable grade, nor can a Line be run from the Lakes, and Leeds south of the one proposed that would join the Quebec and Richmond nearer Quebec than Stanfold, a distance of about 60 miles from Quebec, while from the proposed junction in Nelson, the distance to Quebec is only 28 miles.

The present survey, though merely of a preliminary character will, however, suffice to shew the practicability of the construction of a Railway through this District, and establishes indubitably the comparative economy of its cost; the more extended surveys necessary for final location, would without doubt, improve the projected Line and reduce considerably the cost.

I have prepared the following approximate estimate of the cost of construction, based on the following conditions, viz :—

A Road bed of single track with the usual slopes and an allowance for sidings.

The Masonry to be hammer dressed with quarry face, the culverts, &c., of rubble.

The Track to be of timber found on the Line with a 56lbs per yard T Rail.

The Stations and Buildings to be of wood and the Engine Houses to be provided with Turntables.

The Wharf at Lake Joseph to be of wooden cribs filled with stone, wide enough for three tracks and for the reception and transfer of passengers and freight.

The Land for the Roadway and Stations will be obtained free of charge or at a merely nominal rate, so anxious are the inhabitants to obtain a Railway through this District and so alive are they to the necessity of assisting to carry it out. The price at which the land damage is rated in the Estimate is consequently more than ample.

The prospective business of the proposed Road, is a matter which I am not as yet fully prepared to enter into, not having had sufficient opportunity to make myself accurately acquainted with the amount of traffic now carried on in the district through which the Line will pass.

Nor indeed when the wretched means of communication which at present exist are considered, could any deduction from such data be of any avail. I have it, however, from certain authority that under all the disadvantages of Roads and position, the amount of traffic is very considerable and in confirmation of this I have only to mention that the Townships through which the Road is to pass are the richest in the County of Megantic and as rich in fact as any in Lower Canada.

Already there are 79 Mills of various descriptions in the County, supplying to a very limited extent, the various wants of a secluded community and the agricultural products of the County are very extensive. But when a Railway is carried into the heart of the country, offering as it will do, all the facilities of that improved mode of communication to its inhabitants in carrying on their general business and when it will have given also means of transit to market for the sawed Timber to be obtained there, and for the produce of the inexhaustible mines of Copper and other valuable metals in which the locality abounds and which only require a Railway to put into successful operation, it is impossible from present facts to offer a calcu-

lation, of what may be expected from the Road so soon as it is built, but I unhesitatingly declare, in my opinion, the Megantic Junction Railway will prove equal to the best paying Line in Lower Canada.

The conduct of the persons employed on the Survey has been most exemplary and I beg to offer my best thanks to Mr. Grubb in charge of the party, for the valuable assistance I have at all times received from him. I cannot conclude this imperfect Report, without expressing my own and the obligations of the party, to the Inhabitants of the Townships through which the Survey was made, for the kindness and attention with which we were invariably treated.

I have the honor to be,

Gentlemen,

Your most obedient humble servant,

P. MACQUISTEN,

Engineer.

To the Provisional Committee, }
&c., &c. }

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